

REMARKS

This is a response to the Office Action of April 29, 2009. Claims 3-4, 6-15 and 21-38 are currently pending. Claims 1-2, 5, and 16-20 have been cancelled. Claims 3, 6-9, 21, 25, 31 and 35 have been amended. Applicant asserts that the amendments herein do not introduce any new features that would require the Examiner to conduct an additional search.

Reconsideration is requested in view of the comments and amendments herein.

I. The Office Action

Claims 3, 7, 13-15 and 35 are objected to for informalities.

Claims 6 and 10-15 are objected to as being dependent on a rejected base claim, but would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3, 4, 6-15, 26-28 and 31-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 31-38 would be allowable if re-written or amended to overcome the rejection under 35 U.S.C. 112, second paragraph.

Claims 3, 7-9, 25-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Cull et al. (US 3,220,798).

Claims 21, 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cull et al. (US 3,220,798).

Claims 4, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cull et al (US 3,220,798) in view of Benson et al. (GB 2 159 137).

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hays (US 2,087,031) in view of Onimaru et al. (US 5,616,021) and Durst et al. (US 5,522,723), as applied to claims 10 and 13 above, and further in view of Martin et al. (US 5,165,884).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hays (US 2,087,031) in view of Onimaru et al. (US 5,616,021) as applied to claims 21 and 22 above, and further in view of Yamane et al. (US 3,982,878).

II. Claim Objections

Claims 3, 7, 13-15 and 35 are objected to due to various informalities. The Examiner suggested amending claim 3 to delete the phrase “a combustion chamber,” since the combustion chamber is part of the burner and is not a separate element. Additionally, the Examiner suggested amending claim 3 to recite “a fuel and an oxidant” rather than “said fuel and said oxidant.” Such amendments were made accordingly. In claim 7, “same” in line 3 was changed to “said additional gas.” In claim 13, the phrase “as they are utilized for systematic packings in thermal separation methods, such as spheres or shell bodies” is deleted. With reference to claim 14, the phrase “like a grate” is deleted. In claim 15, the phrase “in particular the grate” is deleted. Referring to claim 35, the phrase “one or more or” is changed to “one or more of.” Accordingly, the objections should be withdrawn. Each of these changes were suggested by the Examiner and therefore should be entered notwithstanding the final rejection.

III. Rejection of Claims 3, 4, 6-15, 26-28, 31-38 Under 35 U.S.C. 112, Second Paragraph

Claims 3, 4, 6-15, 26-28 and 31-38 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With reference to claim 3, the Examiner set forth that it is unclear as to the relationship between the “one or several supply lines for the fuel as well as the oxidant” and the supply lines for “separately” adding said fuel and oxidant to the pre-mix chamber. Claim 3 has been amended to recite “several supply lines” rather than “one or several” as suggested by the Examiner. Regarding claims 31 and 35, the Examiner asserts that it is unclear as to how the “low combustion value gas supply line” could be tangentially arranged to the mixing chamber, since the low combustion value gas is not directly connect to the mixing chamber. Claims 31 and 35 have been amended, deleting the phrase “low combustion value gas,” as suggested by the Examiner. Claim 27 has been cancelled, making the rejection moot. Each of these amendments were suggested by the Examiner and therefore should be entered notwithstanding the final rejection.

IV. The Claims Patentably Distinguish from the References

Independent claims 3, 21 and 25 have been amended to include the features of now cancelled claim 10. According to the Examiner, claim 10 would be allowable if re-written in

independent form including all of the limitations of the base claim and any intervening claims. Applicant asserts that claim 10 was dependent on claim 3; therefore, adding the features of claim 10 to claim 3 necessarily puts claim 3 in condition for allowance. Since the features of claim 10 were previously considered by the Examiner, no new search is required.

Applicant asserts that the same reasoning applies to the systems of independent claims 21 and 25. As amended, each of claims 21 and 25 contain the limitation of now canceled claim 10. The Examiner specifically asserts that “the prior art does not disclose or adequately suggest the claimed apparatus includes a combustion chamber with a porous material with interconnected hollow spaces suitable in size for flame development.” The systems of claims 21 and 25 include the claimed apparatus. As such, Applicant respectfully submits that claims 21 and 25 are now in condition for allowance.

Additionally, the Examiner asserted that independent claims 31 and 35 would be allowable if re-written to overcome the rejections under 35 U.S.C. 112, second paragraph. As stated above in Sections II and III, independent claims 31 and 35 have been amended to overcome the rejections under 35 U.S.C. 112, second paragraph. As such independent claims 31 and 35, along with those claims dependent thereon, are now in condition for allowance.

CONCLUSION

For the reasons detailed above, it is respectfully submitted all claims remaining in the application (Claims 3-4, 6-9, 11-15, 21-26 and 28-38) are now in condition for allowance.

Respectfully submitted,

Fay Sharpe LLP

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Date

A handwritten signature in black ink, appearing to read 'Scott A. McCollister', is written over a horizontal line.

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